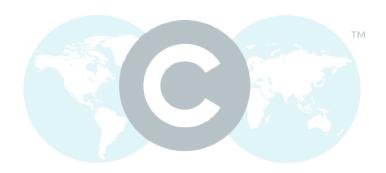
EXHIBIT 20

COPYRIGHT INDUSTRIES IN THE U.S. ECONOMY 2024 REPORT



COPYRIGHT INDUSTRIES IN THE U.S. ECONOMY THE 2024 REPORT



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Prepared for the International Intellectual Property Alliance® (IIPA®)

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Copyright Industries in the U.S. Economy: The 2024 Report is the 20th report on the U.S. copyright industries prepared for the International Intellectual Property Alliance (IIPA) since 1990.

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This latest *Report* updates and supplements 19 previous reports produced by Secretariat (formerly known as Economists Incorporated or Secretariat Economists) for the IIPA:

- Stephen E. Siwek and Harold Furchtgott-Roth, *Copyright Industries in the U.S. Economy* (released in November 1990);
- Stephen E. Siwek and Harold Furchtgott-Roth, *Copyright Industries in the U.S. Economy: 1977-1990* (released in September 1992);
- Stephen E. Siwek and Harold Furchtgott-Roth, Copyright Industries in the U.S. Economy: 1993 Perspective (released in October 1993);
- Stephen E. Siwek and Harold Furchtgott-Roth, *Copyright Industries in the U.S. Economy: 1977-1993* (released in January 1995);
- Stephen E. Siwek and Gale Mosteller, Copyright Industries in the U.S. Economy: The 1996 Report (released in October 1996);
- Stephen E. Siwek and Gale Mosteller, *Copyright Industries in the U.S. Economy: The 1998 Report* (released in May 1998);
- Stephen E. Siwek, Copyright Industries in the U.S. Economy: The 1999 Report (released in December 1999);
- Stephen E. Siwek, Copyright Industries in the U.S. Economy: The 2000 Report (released in December 2000);
- Stephen E. Siwek, Copyright Industries in the U.S. Economy: The 2002 Report (released in April 2002);
- Stephen E. Siwek, Copyright Industries in the U.S. Economy: The 2004 Report (released in October 2004);
- Stephen E. Siwek, Copyright Industries in the U.S. Economy: The 2006 Report (released in January 2007);
- Stephen E. Siwek, Copyright Industries in the U.S. Economy: The 2003-2007 Report (released in July 2009);
- Stephen E. Siwek, Copyright Industries in the U.S. Economy: The 2011 Report (released in November 2011);
- Stephen E. Siwek, Copyright Industries in the U.S. Economy: The 2013 Report (released in November 2013);
- Stephen E. Siwek, Copyright Industries in the U.S. Economy: The 2014 Report (released in December 2014);
- Stephen E. Siwek, Copyright Industries in the U.S. Economy: The 2016 Report (released in December 2016);
- Stephen E. Siwek, Copyright Industries in the U.S. Economy: The 2018 Report (released in December 2018);
 and
- Robert Stoner and Jéssica Dutra, Copyright Industries in the U.S. Economy: The 2020 Report (released in December 2020).
- Robert Stoner and Jéssica Dutra, Copyright Industries in the U.S. Economy: The 2022 Report (released in December 2022).

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IIPA is a private sector coalition, formed in 1984, of trade associations representing U.S. copyright-based industries working to improve copyright protection and enforcement abroad and to open foreign markets closed by piracy and other market access barriers. Members of the IIPA include Association of American Publishers (www.publishers.org), Entertainment Software Association (www.theesa.com), Independent Film & Television Alliance (www.ifta-online.org), Motion Picture Association (www.motionpictures.org), and Recording Industry Association of America (www.riaa.com). Collectively, IIPA's five member associations represent over 3,200 U.S. companies producing and distributing copyrightable content. The materials produced and distributed by IIPA member companies include video games for consoles, handheld devices, personal computers, and online; motion pictures and television programming distributed in all formats (including cinema, television, online, mobile, DVD, etc.); music recorded in all formats (from digital files to CDs and vinyl) for streaming and other online services, as well as broadcasting, public performance, and synchronization in audiovisual materials; and fiction and non-fiction books, educational, instructional and assessment materials, and professional and scholarly journals, and databases. Visit https://iipa.org/.

PREFACE

The International Intellectual Property Alliance (IIPA), founded in 1984, is an alliance of trade associations representing creators, producers, and distributors of copyrighted material, including: movies and television programming; recorded music; entertainment software and video games; and books and journals. Since its inception, the IIPA has worked with the U.S. government, foreign governments, and rights holders to improve copyright protection and enforcement abroad and to open foreign markets closed by piracy and other market access barriers. These efforts have resulted in significant improvements in foreign copyright laws and on-the-ground enforcement in dozens of countries, as well as the lowering of market access barriers to allow creators and the workers employed by the creative industries to compete on a level playing field in global markets. These legal reform, enforcement, and market access improvements have had a substantial positive impact on the creative industries' contributions to the U.S. economy, whether measured in terms of overall contribution, employment and wages, or foreign sales and exports, to the benefit of millions of individuals and enterprises in the United States.

In 1990, IIPA commissioned the first economic study to quantify the contributions of the copyright industries to the U.S. economy and, since then, has periodically commissioned subsequent reports. *Copyright Industries in the U.S. Economy: The 2024 Report (2024 Report)* is the 20th such report. Stephen E. Siwek, at Economists Incorporated (now known as Secretariat), prepared the first study and every subsequent study through the 17th report in 2018. With the retirement of Mr. Siwek, Robert Stoner and Jéssica Dutra of Secretariat, using the methodology pioneered by Mr. Siwek, have prepared subsequent reports, including the *2024 Report*. Like the *2022 Report*, which broke new ground, the *2024 Report* again measures the copyright industries' significant contributions to the digital economy, as that concept has been defined by the U.S. Bureau of Economic Analysis ("BEA").

In the past few decades, as international trade in copyrighted materials increased, foreign governments and intergovernmental organizations, such as the World Intellectual Property Organization (WIPO), took note of the significance of the copyright industries to national economies, and the positive impact these industries were having on economic growth, technological innovation, digital trade, and cultural diversity. In 2003, WIPO took a critical step forward to document this impact by issuing a Guide on Surveying the Economic Contribution of the Copyright-Based Industries (Guide). The Guide, developed by an experts' group of economists from many countries, including Mr. Siwek, described methodologies for measuring the role of copyright industries in domestic economies. Those methodologies have since been used in over 50 countries' national reports. In 2015, WIPO published a revised edition of the Guide,1 which referenced the many national copyright industry studies that were released since the original Guide was published. The revised Guide also included a variety of tables and charts that quantify the extent to which the WIPO principles of copyright contributions to national economies have been adopted in national studies throughout the world. These national studies provide the economic underpinnings for efforts to open markets for new and existing methods of dissemination of copyrighted materials, including by reforming copyright laws and improving enforcement to effectively address copyright piracy.2

¹ Guide on Surveying the Economic Contribution of the Copyright-Based Industries (Guide), revised 2015, available at: https://www.wipo.int/copyright/en/economic-performance.html.

² Various national studies were described and compared in a 2021 WIPO Report titled, The Economic Contributions of the Copyright Industries, available at https://www.wipo.int/export/sites/www/copyright/en/docs/performance/overview_results_2021.pdf. The WIPO website provides links to 51 country/regional studies employing virtually the same agreed-upon methodology at https://www.wipo.int/copyright/en/economic-performance.html.

The 2024 Report covers the period from 2020-2023 and is based almost entirely on U.S. government data. The report shows that in the wake of the COVID-19 pandemic the copyright industries continued to be a significant contributor to the United States economy. In fact, during this tumultuous period the copyright industries continued to: (1) make up a large percentage of value added to GDP; (2) create more and better paying jobs than other sectors of the U.S. economy; (3) grow faster than the rest of the U.S. economy as well as other large economies; (4) contribute substantially to U.S foreign sales and exports, outpacing many industry sectors; and (5) make significantly large contributions to what the BEA defines as the digital economy, which does not even encompass the full scope of the copyright industries' digital activities.

Despite the successes of the copyright industries during the period covered in this *Report* (and in the prior reports), significant challenges remain. Problems such as outdated copyright and related enforcement laws, inadequate or ineffective enforcement (especially against online piracy), unlicensed uses of copyright materials, and market access challenges inhibit the growth of digital markets in the United States and abroad. Economic reports such as this one underscore the stakes and provide a compelling argument for improved laws, enforcement, and market access to promote and foster the growth of the copyright industries throughout the world for the benefit of consumers, as well as the creators, producers, and distributors of copyrighted materials and their workers.

Kevin M. Rosenbaum, Pete C. Mehravari, and Sydney G. Blitman
 International Intellectual Property Alliance

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Copyright Industries in the U.S. Economy: The 2024 Report demonstrates that the core copyright industries of the United States — those industries whose primary purpose is to create, produce, distribute, or exhibit copyright materials — provide significant value added to Gross Domestic Product (GDP); a significant number of high-paying jobs; real growth which outpaces growth in the rest of the economy; and substantial foreign sales and exports, surpassing many industry sectors.

A. Copyright Industries Contribute Significantly to U.S. GDP

- In 2023, the value added by the core copyright industries to U.S. GDP reached more than \$2 trillion dollars (\$2,096.31 billion), accounting for 7.66% of the U.S. economy.³
- In 2023, the value added by the total copyright industries to GDP⁴ exceeded \$3.3 trillion (\$3,369.08 billion), accounting for 12.31% of the U.S. economy.

B. Copyright Industries Employ Millions of Workers, Who Earn a "Compensation Premium"

- The core copyright industries employed almost 11.6 million workers in 2023, accounting for 5.43% of the entire U.S. workforce, and 6.10% of total private employment in the U.S.
- The average annual 2023 compensation paid to core copyright workers \$141,880 far exceeds the average annual compensation paid to all U.S. workers \$94,363 amounting to a 50% "compensation premium" over the average U.S. annual wage.
- The total copyright industries employed over 21.1 million workers in 2023, accounting for 9.91% of all U.S. employment, or 11.14% of all private employment in the United States. The average annual compensation paid to employees of the total copyright industries in 2023, \$121,018, exceeds the U.S. average annual wage by around 28%.

C. Copyright Industries' Real Growth Outpace the Rest of the U.S. Economy

 During the period 2020-2023, the core copyright industries grew at an aggregate annual rate of 9.23%. The average annual growth rate of the entire U.S. economy over the same period was only 3.41%. The core copyright industries outpaced the U.S. economy growth almost threefold.

³ Unless expressed otherwise, all dollar amounts in this report are nominal amounts.

The "total" copyright industries include not only the core copyright but also the partial copyright, non-dedicated support, and interdependent industries. "Partial" copyright industries are industries in which only some aspect or portion of the products that they create qualify for copyright protection. These industries range from fabric to jewelry to furniture to toys and games. "Non-dedicated support" industries include industries that distribute both copyright and non-copyright protected materials to businesses and consumers. Examples here include transportation services, telecommunications, and wholesale and retail trade. As in past studies, only a portion of the total value added by non-dedicated support and partial copyright industries is considered part of the copyright industries. "Interdependent" industries include those that produce, manufacture, and sell equipment whose function is primarily to facilitate the creation, production, or use of works of copyrighted matter. These industries include manufacturers, wholesalers, and retailers of TV sets, personal computers, and other devices, and usage—dependent products including blank recording material, and certain categories of paper.

- During the same period, the total copyright industries grew at an annual rate of 6.69%, outpacing the U.S. economy average growth almost twofold.
- The average annual growth rate of the U.S. core copyright industries also significantly outpaced the GDP growth of the world's other largest economies of China, Germany, Japan, and India during 2020-2023.

D. Copyright Industries Contribute Significantly to Foreign Sales and Exports, Outperforming Many Major U.S. Industry Sectors

- Sales of select U.S. copyright products in overseas markets amounted to \$272.6 billion in 2023, representing an increase from 2020 to 2023.⁵
- The foreign sales of selected copyright industry sectors exceeded foreign sales of other major U.S. industries, including the chemicals manufacturing industry (\$170.7 billion), the pharmaceutical and medicines industry (\$107.3 billion), the agricultural products industry (\$124.7 billion), and the aerospace products and parts industry (\$130.5 billion).

E. Copyright Industries are a significant portion of the Digital Economy

 In 2022, core copyright industries accounted for 51.39% of the U.S. digital economy, while total copyright industries accounted for 63.13% of U.S. digital economy value added.

In 2022, core and total copyright industries contributed 49.1% and 56.6% respectively to U.S. digital economy employment.

Unfortunately, despite the undeniable importance of continuing research into the **Digital Economy**, the BEA's Digital Economy Satellite Account is no longer produced due to budget constraints. The last available BEA numbers do not encompass the full range of the copyright industries' digital activities, such as digital production of music and e-book publishing, and therefore likely understate the contribution of the copyright industries to the U.S. digital economy.

⁵ This includes total foreign sales of the following "selected" core copyright industry sectors: recorded music; motion pictures, television, and video; software publishing; and non-software publications including newspapers, books, and periodicals.



II. INTRODUCTION

Copyright Industries in the U.S. Economy: The 2024 Report is the 20th in a series issued over the last three and half decades by Secretariat, bupdating and supplementing 19 earlier reports prepared on behalf of the IIPA. This latest Report presents data on the value added contributions of the copyright sector to the U.S. economy for the years 2020-2023; the percentage contribution of the copyright sector to the overall U.S. economy; the relative growth of the copyright industries compared with the remainder of the economy; employment levels in the copyright sector; the average compensation for workers in the copyright sector in comparison to other sectors; and the contributions of selected copyright industries to exports and foreign sales. This Report also provides, for the second (and unfortunately, perhaps, final) time, data on the contribution of the copyright industries to the digital economy in the United States, as measured by value added and percent of employment. The underlying data used in this Report is current through 2023.7

This Report confirms once again that the U.S. copyright industries contribute significantly to U.S. GDP. The creative industries continue to outpace the rest of the economy in real growth, a fact that was particularly highlighted in recent years by the creative industries' notably high economic activity growth as measured by value added at the same time the U.S. economy experienced more moderate rates when recovering from effects of the COVID-19 pandemic.

The copyright industries also continue to employ millions of workers whose average compensation levels substantially exceed the average level of compensation paid to all U.S. workers. Moreover, indicators from select core copyright industries of the U.S. demonstrate growth in terms of foreign sales and exports during 2020-2023, with foreign sales and exports in those sectors outperforming many key U.S. industrial sectors. Finally, the copyright industries are major contributors to the U.S. digital economy.

This study continues to reflect the use of industry data classifications adopted under the North American Industry Classification System ("NAICS"), which have been updated since the last Report. An industrial classification system such as NAICS "facilitates the collection, tabulation, presentation, and analysis of data relating to establishments and ensures that data about the U.S. economy published by U.S. statistical agencies are uniform and comparable. NAICS ensures that such data is uniform and comparable among Canada, Mexico, and the United States."8 In particular, the data classifications and industry framework developed in NAICS have been widely implemented by U.S. statistical agencies, including the U.S. Census Bureau and the BEA, which collect data used in this Report.

This Report also continues to follow the international standards and recommendations propounded by the World Intellectual Property Organization ("WIPO") in its 2015 review regarding the development of economic and statistical standards to measure the impact of domestic copyright industries on domestic

The economist group within Secretariat was formerly known as Economists Incorporated or Secretariat Economists.

In this study the values presented for 2022 and 2023 for value added and exports have been updated from the results presented in Copyright Industries in the U.S. Economy: The 2022 Report. These updates result from data revisions published by the U.S. Bureau of Economic Analysis ("BEA") and by other government agencies since the last Report was completed. The general methodology applied to the calculation of value added and foreign sales has remained the same, for several iterations, at least since Copyright Industries in the U.S. Economy: The 2016 Report. The change in methodology and data source applied for the employment numbers in the 2022 Report have been maintained. More details on that previous methodological change are included in the Employment section of the Copyright Industries in the U.S. Economy: The 2022 Report. As such, there have been no methodology changes in the present Report vis-à-vis Copyright Industries in the U.S. Economy: The 2022 Report.

Executive Office of the President — Office of Management and Budget, North American Industry Classification System, United States, 2017, page 77.

economies.9

The data in this *Report* quantify the size and critical importance of the copyright industries to the U.S. economy, generally using the most current data available. As in the past, the U.S. copyright industries' contribution to the U.S. economy is measured by three economic indicators: value-added to the U.S. gross domestic product ("GDP") in current dollars, as well as real annual growth; industry employment, share of national employment, and compensation per employee; and revenues generated from foreign sales and exports. We are also complementing these indicators by exploring the critical role the copyright industries play in the U.S. digital economy, as defined by the BEA.¹⁰

As this *Report* documents, the U.S. copyright industries continue to make a disproportionately positive contribution to real growth in U.S. GDP.



⁹ World Intellectual Property Organization, *Guide on Surveying the Economic Contribution of the Copyright-Based Industries*, 2015 Revised Edition.

When comparing the numbers of this *Report* with past reports, changes in previously calculated numbers for the same years may be noted, even when using the same data sources and the same methodology. This can arise due to three factors (while the first two factors apply to all calculations, the third factor applies only to Digital Economy numbers): *i*) All federal agencies that provide statistics (e.g., BEA, Census, BLS) are constantly revising their numbers using updated information that was not available at the time our previous reports were written; *ii*) With the changes in the NAICS classifications that occur every five years, there is a re-splitting of the economy: while most sectors remain unchanged, there are sectors that were previously self-contained and are now split into multiple parts, and some sectors that used to be independent that are now considered jointly; *iii*) Since the last report, the BEA has also slightly changed the contribution of each NAICS to the Digital Economy, and these weights are used in the overall computation. Since this *Report* is not looking at a single industry, but rather an amalgam of several industries constituting the copyright industries, small year-to-year updates in each industry can add up to non-trivial magnitudes.

III. THE COPYRIGHT INDUSTRIES

In preparing this *Report* we followed most of the methodology of our latest reports, conforming to the international standard for classifying copyright industries defined by WIPO.¹¹ The basis of the classification "provides comprehensive, integrated, and internationally agreed recommendations for the measurement and analysis of economic activity."¹² There are four categories: core, partial, non-dedicated, and interdependent, which are described in further detail below.

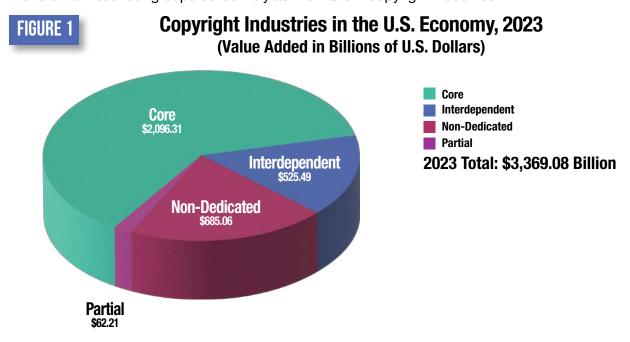
Core industries include those industries whose primary purpose is to create, produce, distribute, or exhibit copyright materials. These industries include books, newspapers and periodicals, motion pictures, recorded music, radio and television broadcasting, and software in all formats, including video games.

Partial copyright industries include industries in which only some aspect or portion of the products they create qualify for copyright protection. These industries range from fabric to jewelry to furniture to toys and games. As in past reports, only a portion of the total value added by these industries is considered part of the copyright industries.

Non-dedicated support industries include those that distribute both copyright and non-copyright protected materials to businesses and consumers. Examples here include transportation services, telecommunications, and wholesale and retail trade. As in past reports, only a portion of the total value added by these industries is considered part of the copyright industries.

Interdependent industries include those that produce, manufacture, and sell equipment whose function is primarily to facilitate the creation, production, or use of works of copyrighted matter. These industries include manufacturers, wholesalers, and retailers of TV sets, personal computers, and usage dependent products including blank recording material and certain categories of paper.

We refer to these four groups collectively as the "total" copyright industries.



¹¹ See World Intellectual Property Organization, Guide on Surveying the Economic Contribution of the Copyright-Based Industries, 2015 Revised Edition, Annex IIA.

¹² *Id.* 4, ¶ 101

IV. VALUE ADDED BY THE COPYRIGHT INDUSTRIES

One of the main ways to capture an industry's contribution to the national economy is to measure the industry's value added. Value added reflects the economic contribution of labor and capital of a particular industry to the larger economy net of intermediate inputs. The sum of the value added of all industries in the United States is equal to gross domestic product ("GDP"), a standard measure of the size of economies around the world. For this reason, value added calculations can be used to draw comparisons of the relative size and growth rates of different industries in a way that is consistent with the federal government's national income and product accounting data.

This *Report* gives continuity to the methodology in recent reports, in which industry specific value-added estimates produced by the BEA were employed to derive the contribution made by the core, interdependent, non-dedicated, and partial copyright industries to the U.S. economy. A benefit of using this data is that the BEA calculates both current dollar and constant (inflation adjusted) dollar value added for the industry classifications that it analyzes. In this *Report*, the constant dollar value added figures are used to derive estimates of the real growth rates achieved by the core and total copyright industries on a year-by-year basis. This data is also used to measure the contribution made by the copyright industries to the real annual growth achieved by the U.S. economy as a whole.

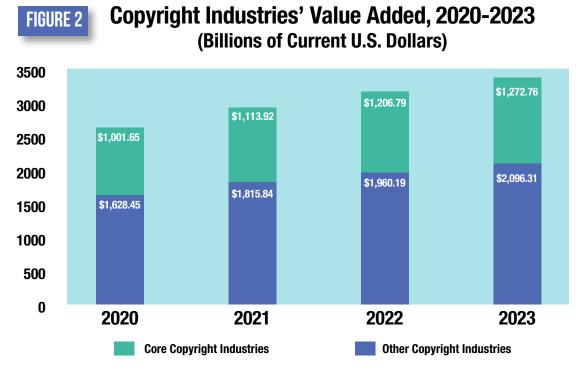
Within this context, the copyright industries remain a particularly important contributor to U.S. GDP. As shown in **Table 1** below, the current dollar value added to U.S. GDP by the core copyright industries was \$2,096.31 billion in 2023. In the same year, U.S. GDP reached \$27.3 trillion. Thus, in 2023 the core copyright industries maintained a 7.66% share of nominal U.S. GDP. The value added by the total copyright industries in the same period is also shown in the same table. As reported, the value added to U.S. GDP by the total copyright industries in 2023 was over \$3,369.08 billion, or 12.31% of U.S. GDP.



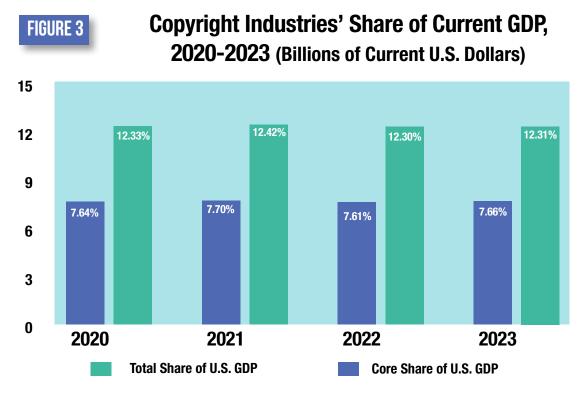
Copyright Industries Value Added, 2020-2023 (Billions of U.S. Dollars)

	2020	2021	2022	2023
Core Copyright				
Core Copyright Industries	\$1,521.45	\$1,602.17	\$1,609.65	\$1,810.25
Total U.S. GDP	\$20,533.10	\$21,381.00	\$21,060.50	\$23,315.10
Core Share of U.S. GDP	7.41%	7.49%	7.64%	7.76%
Total Copyright				
Total Copyright Industries	\$2,482.64	\$2,601.26	\$2,601.35	\$2,919.15
Total U.S. GDP	\$20,533.10	\$21,381.00	\$21,060.50	\$23,315.10
Total Share of U.S. GDP	12.09%	12.17%	12.35%	12.52%

As shown in **Figure 2**, our current estimates of the value added for the core copyright industries increased from \$1,628.45 billion in 2020 to \$2,096.31 billion in 2023. The estimated value added for the other (non-core) copyright industries rose from \$1,001.65 billion in 2020 to \$1,272.76 billion in 2023.



The copyright industries' current share of the U.S. economy is provided in **Figure 3** below. Based on the methodology described above, we now estimate that the core copyright industries' current share of the U.S. economy has stayed approximately constant, representing 7.66% of the U.S. economy in 2023. The total copyright industries' share of U.S. GDP was 12.31% in 2023.



To put these figures in perspective, it is useful to compare the economic contributions of the U.S. copyright industries to the contributions made by other U.S. industries in the same time period. Interindustry comparisons to the U.S. copyright industry in 2022 and 2023 are shown in **Table 2** below.



Value Added Comparisons Between Copyright and Other Sectors, 2022-2023 (Billions of U.S. Dollars)

	2022	2023
Copyright		
Core Copyright	\$1,960.19	\$2,096.31
Total Copyright	\$3,166.97	\$3,369.08
Government		
Federal Government	\$939.40	\$994.00
State & Local Government	\$1,997.20	\$2,113.50
Other Industries		
Construction	\$1,090.10	\$1,203.80
Healthcare & Social Assistance	\$1,856.40	\$2,036.00
Finance & Insurance	\$1,932.90	\$1,988.20

As reported in **Table 2**, the total value added to the U.S. economy by the entire federal government in 2023 was \$994 billion.¹³ This amount is approximately 70% lower than the value added by the total copyright industries in the same year. In 2023, the total value added to the U.S. economy by state and local governments was \$2,113.50 billion, or over \$2.1 trillion. This value is approximately 37% lower than the value added by the total copyright industries in 2023. Comparisons of the copyright industries' value added in 2022 and 2023 to other sectors of the U.S. economy are also provided in **Table 2**. These comparisons clearly document the size and importance of the copyright industries today.

The value-added estimates for the copyright industries that are contained in this *Report* reflect underlying data obtained from the BEA, the U.S. Census Bureau, and other government statistical agencies. In particular, the estimates of copyright industry value added make direct use of the industry-specific estimates of U.S. value added regularly published by the BEA. These industry-specific estimates (in both current dollar and real terms) are used as starting points to derive the contributions made by the core and total copyright industries to U.S. GDP.

Real growth rates in value added experienced during the period 2020-2023 by the U.S. copyright industries, and by the U.S. economy as a whole, are provided in **Table 3**.14 For each of the periods 2020-2021, 2021-2022, and 2022-2023, the U.S. core copyright industries experienced astonishing real growth, despite the difficult economic environment caused in large part by the COVID-19 pandemic, but further complicated by supply chain disruptions after the pandemic, an energy and food crisis due to Russia's war on Ukraine, inflation, and other geopolitical tensions. Over the entire period 2020-2023, the core copyright industries grew at an average real annual growth rate of 9.23%.

The total copyright industries experienced a comparable pattern of real growth during the years 2020-2023. As shown in **Table 3**, in 2020-2021, 2021-2022, and 2022-2023, the total copyright industries also grew at very impressive rates, despite the difficult economic environment described above. For the full period of 2020-2023, the real value added by the total copyright industries grew at an average rate of 6.69% per year.

¹³ U.S. Bureau of Economic Analysis, "Value Added by Industry" (accessed Saturday, November 16, 2024)

¹⁴ Real growth rates measure changes in constant dollar value added over time.

To provide a basis of comparison, the growth patterns for the U.S. economy are also provided in **Table 3**. For the period 2020-2023, the U.S. economy grew at an average annual rate of 3.41%. For the individual years within the period of focus, the U.S. economy grew at annual rates of 5.80%, 1.94%, and 2.54% respectively. As these figures make clear, for this period, the compound annual growth rate achieved by the U.S. copyright industries significantly exceeded the compound annual growth rate achieved by the U.S. economy as a whole, with core copyright industries growing on average almost threefold and total copyright industries growing almost twofold the average of all U.S. industries.

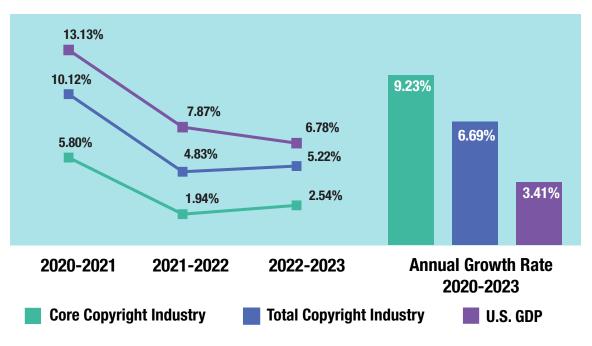


Real Annual Growth Rates, Value Added to U.S. GDP 2020-2023

	2020-2021	2021-2022	2022-2023	Annual Growth Rate 2020-2023
Core Copyright Industries	13.13%	7.87%	6.78%	9.23%
Total Copyright Industries	10.12%	4.83%	5.22%	6.69%
U.S. GDP	5.80%	1.94%	2.54%	3.41%

We illustrate this data graphically in **Figure 4**, which shows the real annual growth rates experienced by the copyright industries, compared with the real growth rate achieved by the U.S. economy as a whole during the periods 2020-2021, 2021-2022, and 2022-2023. As Figure 4 demonstrates, since 2020 the core and the total copyright industries have grown substantially faster than the real annual rate of growth experienced for the U.S. GDP as a whole. These industries have clearly been able to withstand periods of extreme turbulence in the economic environment.





The astounding growth rates of U.S. copyright industries aren't just impressive when comparing to real growth rate of the U.S. economy itself, but also when comparing to those of the world's next four largest economies — China, Germany, Japan, and India — as shown in **Table 4** and **Figure 5**. These economies provide very good benchmarks, as both Germany and Japan are good examples of developed economies that have long occupied the list of world's biggest economies; China has been among world's fastest growing economies; and India is currently the fastest growing major economy. For the period 2020-2023, U.S. core copyright industries have outpaced average annual real growth of all economies included for comparison by at least 1 percentage point.



Real Annual Growth Rates, Value Added to Other Large Economies GDP, 2020-2023

		2020- 2021	2021- 2022	2022- 2023	Annual Growth Rate 2020-2023
U.S.	Core Copyright Industries	13.13%	7.87%	6.78%	9.23%
U.S.	Total Copyright Industries	10.12%	4.83%	5.22%	6.69%
	China GDP	8.45%	2.99%	5.20%	5.52%
Next 4 Biggest Economies in the World	Germany GDP	3.16%	1.81%	-0.30%	1.54%
in 2024	Japan GDP	2.56%	0.95%	1.92%	1.81%
0_ 1	India GDP	9.69%	6.99%	7.58%	8.08%

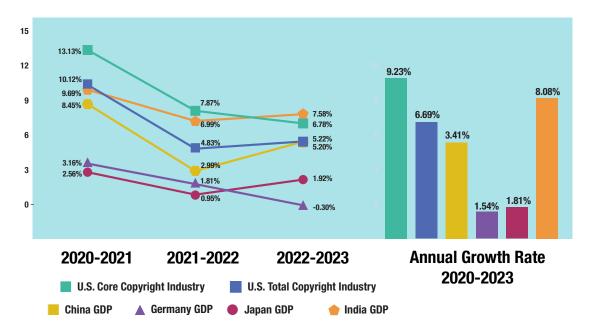
¹⁵ Real growth rates for China, Germany, Japan, and India were calculated using their yearly GDP expressed in constant 2015 US\$. Data was obtained from database World Development Indicators, which was retrieved on November 10, 2024 with the last update taking place on October 24, 2024. Source: World Bank national accounts data, and OECD National Accounts data files. Series code: NY.GDP.MKTP.KD. License: https://datacatalog.worldbank.org/public-licenses#cc-by



PAGE 10 VALUE ADDED BY THE COPYRIGHT INDUSTRIES

FIGURE 5

Real Annual Growth Rates, Value Added to Other Large Economies GDP, 2020-2023





V. EMPLOYMENT IN THE COPYRIGHT INDUSTRIES

In this *Report*, we estimate the number of workers employed in the core and total copyright industries for the years 2020-2023. The procedures used to derive our estimates of employment in this *Report* are the same as those used in the last report (the second to use this same methodology) and consistent with the most recently updated NAICS classification system.¹⁶

Employment figures for the core and total copyright industries for the years 2020 – 2023 are provided in **Table 5**. As shown, the core copyright industries employed more than 10.46 million workers in 2020. These workers represented 5.37% of the total U.S. workforce in 2020. The copyright employment numbers have been recovering steadily since the effects of the COVID-19 pandemic. The share of total U.S. employment by the core and total copyright industries held fairly steady between 2020 and 2023. In 2023, the number of core copyright employees in the United States was upwards of 11.57 million, representing about 5.43% of the total U.S. workforce in 2023. In 2023, employment in the total copyright industries was almost 21.14 million workers, representing about 9.91% of the total U.S. workforce in 2023.¹⁷

TABLE 5

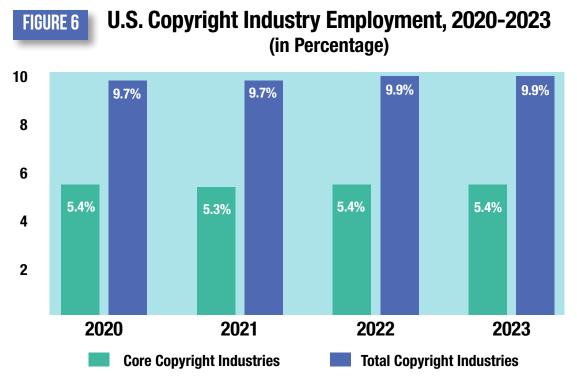
Copyright Industries and Total U.S. Employment, 2020-2023 (in thousands of jobs)

	2020	2021	2022	2023
Core Copyright				
Core Copyright Industries	10,460.5	10,348.7	11,271.1	11,573.6
Total U.S. Employment	194,928.5	195,672.8	207,667.6	213,239.4
Core Share of Total U.S. Employment	5.37%	5.29%	5.43%	5.43%
Total Copyright				
Total Copyright Industries	18,936.1	18,905.7	20,585.8	21,138.1
Total U.S. Employment	194,928.5	195,672.8	207,667.6	213,239.4
Total Share of Total U.S. Employment	9.71%	9.66%	9.91%	9.91%

These same U.S. copyright industry employment figures are also expressed graphically in **Figure 6** below. Core copyright employment grew from 10.46 million in 2020 to 11.57 million in 2023, with the share of total U.S. employment varying between 5.29% and 5.43% in this time period. Total copyright employment grew from 18.93 million in 2020 to 21.13 million in 2023, representing a share of total U.S. employment that varied between 9.66% and 9.91% during this period.

¹⁶ Employment data is taken from IMPLAN. IMPLAN employment numbers are often larger than that reported in most public employment datasets, especially since IMPLAN, unlike the data used in reports prior to the *2022 Report*, include proprietor and seasonal employment values. For more detail on how IMPLAN calculates employment, see https://support.implan.com/hc/en-us/articles/115009510967-Employment-Data-Details. For more information on the IMPLAN modeling process, visit IMPLAN.com.

¹⁷ There have been some non-trivial differences in the employment numbers measured in previous reports. For a complete explanation, please see *supra* note 10.



While the share of total U.S. employment shown above measures the contribution over all U.S. employment, it is also useful to look at U.S. copyright industries' contribution to U.S. private employment, which excludes any type of government employment, and thus measures the employment exclusively generated by the private industry. For U.S. private industry, employment growth during the years 2020 through 2023 was comparable to the employment trends experienced for the U.S. economy as a whole. As shown in **Table 6** below, total U.S. private employment increased slightly from 172 million in 2020 to 189.7 million in 2023. During these years, the core copyright industries' share of all private employment varied between 5.98% and 6.10% while the total copyright industries' share of private employment varied between 10.93% and 11.14%.



Copyright Industries and Total Private Employment, 2020-2023 (in thousands of jobs)

	2020	2021	2022	2023
Core Copyright				
Core Copyright Industries	10,460.5	10,348.7	11,271.1	11,573.6
Total U.S. Private Employment	172,090.4	172,936.1	184,795.1	189,753.3
Core Share of Total U.S. Private Employment	6.08%	5.98%	6.10%	6.10%
Total Copyright				
Total Copyright Industries	18,936.1	18,905.7	20,585.8	21,138.1
Total U.S. Private Employment	172,090.4	172,936.1	184,795.1	189,753.3
Total Share of Total U.S. Private Employment	11.00%	10.93%	11.14%	11.14%

In this *Report*, we also quantify the average compensation per employee received by workers in the copyright industries and in the U.S. economy as a whole across all industries. In these calculations, "compensation" means "wages and salary accruals and supplements to wages and salary accruals." These supplements include "employer contributions for employee pensions and insurance funds and employer contributions for government social insurance." This compensation data is shown in **Table 7**.19 During the period 2020-2023, average compensation per employee in both the core and total copyright industries increased. As shown below, average compensation earned by core copyright employees was \$141,880 in 2023. This value was 50% higher than the average compensation paid to all U.S. employees (\$94,363). For total copyright industry workers, average compensation in 2023 was \$121,018, about 28% higher than the U.S. average compensation.

TABLE 7

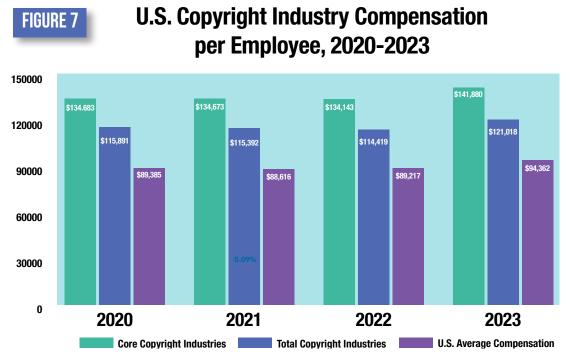
Copyright Industries and Total Compensation per Employee 2020-2023

	2020	2021	2022	2023
Core Copyright				
Core Copyright Industries	\$134,683	\$134,673	\$134,144	\$141,880
Ratio: Core to U.S.	1.51	1.52	1.50	1.50
Total Copyright				
Total Copyright Industries	\$115,892	\$115,392	\$114,419	\$121,018
Ratio: Total to U.S.	1.30	1.30	1.28	1.28
U.S. Average Compensation	\$89,385	\$88,617	\$89,217	\$94,363

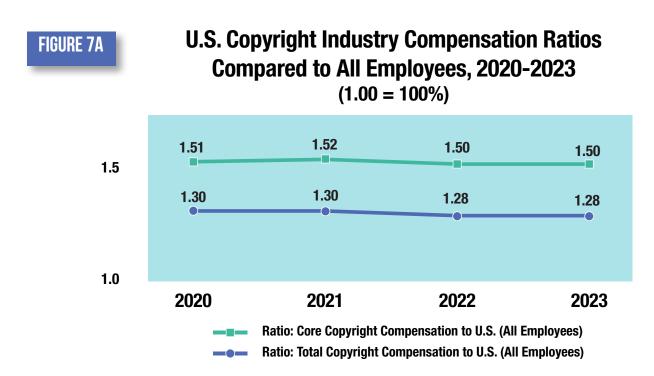
¹⁸ See U.S. BEA, Glossary Index, https://www.bea.gov/help/glossary.

19 Data for Tables 7, 7A, and 7B rely on Real Compensation for industries, measured in 2022 US\$. Differences in the level of compensation between this Report and our previous report could also result from changes in the value of the US\$, since the previous report was measured in 2020 US\$.

Compensation data is also reported graphically in Figure 7.



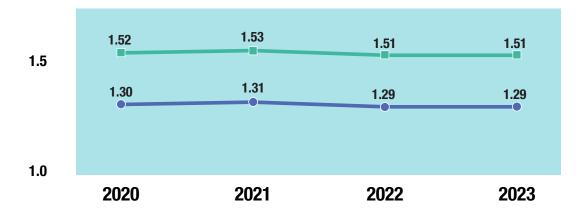
The compensation premium paid to copyright industry employees can also be illustrated by ratio. In **Figure 7A**, the average compensation paid to employees in the core and total copyright industries is compared to the average compensation paid to all workers in the United States. For core copyright employees, the compensation premium was between approximately 50%–52% from 2020 to 2023. For total copyright employees, the compensation premium was between about 28%–30% during this same time period.



Copyright industry workers are also paid more than the average U.S. worker in private industry. As shown in **Figure 7B**, from 2020 to 2023 the compensation paid to workers in the core copyright industries varied between 51%–53% higher than the average compensation paid to U.S. private industry. Similarly, over the same time period, the compensation paid to workers in the total copyright industries was between 29%–31% higher than the average compensation paid to U.S. private industry employees as a whole.

FIGURE 7B

U.S. Copyright Industry Compensation Ratios Compared to Private U.S. Employees, 2020-2023 (1.00 = 100%)



Ratio: Core Copyright Compensation to U.S. (All Employees)
Ratio: Total Copyright Compensation to U.S. (All Employees)



VI. U.S. COPYRIGHT MATERIALS IN WORLD MARKETS

Consumers in non-U.S. markets continue to demand products that embody American creativity. Copyright products that are sold abroad may be manufactured in the U.S. or in foreign markets, but, in either case, the creative (copyrighted) components of those products are nurtured by the protection afforded under U.S. laws.

As noted in prior reports on these industries, we believe that the U.S. government's statistics on "exports" of copyright products generally fall short of accurately measuring the true value of American copyright works sold abroad. We recognize that, in recent years, efforts have been undertaken to improve the scope of the copyright product export statistics that are gathered in government surveys. For example, the U.S. Census Bureau ("Census") reports "Estimated Export Revenue for Employer firms" for a number of the copyright industries, including the motion picture industry, publishers, and the software industry. However, the export statistics reported by Census are substantially lower than foreign market sales figures derived from non-government sources. Additionally, these statistics often do not meet Census's own publication standards due to high sampling variability, which makes it more difficult to track annual growth.

As in past reports, we again provide estimates of foreign sales and exports for some core copyright areas for which we have data during the years 2020 through 2023: recorded music; motion pictures, television and video; software publishing; and non-software publications including newspapers, books, and periodicals. For these years, we report total foreign sales for these "selected" core copyright industries of \$227.12 billion in 2020, \$243.91 billion in 2021, \$264.01 billion in 2022, and \$272.58 billion in 2023. **Figure 8** below demonstrates these figures graphically.



Revenue Generated by Foreign Sales and Exports of Selected Core Copyright Sectors, 2020-2023 (Billions of U.S. Dollars)



²⁰ See U.S. Census Bureau, Service Annual Survey Latest Data (NAICS-basis): *Estimated Export Revenue for Employer Firms:* 2013 through 2022, Table 6, https://www.census.gov/data/tables/2022/econ/services/sas-naics.html.

Annual growth rates for foreign sales of these selected core copyright industries are provided in **Table 8** below. The annual growth rate for exports and foreign sales has been equally impressive, indicating that foreign sales for these selected copyright industries have been growing at significant rates throughout the observed period of 2020-2023.



Annual Growth Rate of Foreign Sales and Exports 2020-2023

	2020-2021	2021-2022	2022-2023
Growth Rate	7.39%	8.24%	3.25%

In addition, the foreign sales and exports of these selected core copyright industries exceeded the entirety of exports of several other major industry sectors. As reported in **Table 9** below, for 2023, the selected copyright industry sales in foreign markets exceeded the exports of the following U.S. industries: chemicals (excluding pharmaceutical & medicines); agricultural products; aerospace products and parts; pharmaceuticals & medicines; and food & kindred products. More specifically, the selected copyright industries generated non-U.S. sales in 2023 of \$272.6 billion. In the same year, the foreign sales and exports for the U.S. chemicals manufacturing industry reached \$170.7 billion; U.S. agricultural foreign sales and exports were approximately \$124.7 billion; foreign sales and exports for U.S. aerospace products and parts approached \$130.5 billion; foreign sales and exports of U.S. pharmaceutical and medicines reached \$107.3 billion; and foreign sales and exports of U.S. food and kindred products were approximately \$81.3 billion.



Foreign Sales and Exports for Selected U.S. Industries 2023 (Billions of U.S. Dollars)

	2023
Selected Copyright Industries	\$272.6
Chemicals (excluding Pharmaceuticals & Medicines) ¹	\$170.7
Agricultural Products ²	\$124.7
Aerospace Products and Parts ¹	\$130.5
Pharmaceuticals & Medicines ¹	\$107.3
Food & Kindred Products ¹	\$81.3

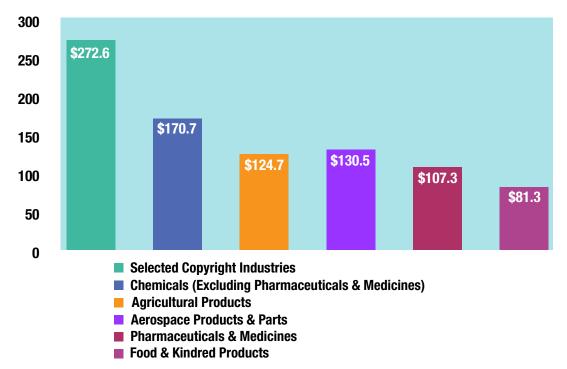
¹Source: U.S. Census Bureau: Economic Indicators Division USA Trade Online.

Foreign sales and exports data by industry are also reported graphically in **Figure 9**. The data shows that American copyright works sold abroad make a significant contribution to the overall trade balance of the U.S. economy that compares very favorably to other significant industry sectors.

²Source: U.N. Comtrade database, https://comtrade.un.org/

FIGURE 9

Foreign Sales and Exports for Selected U.S. Industries, 2023 (Billions of U.S. Dollars)





VII. COPYRIGHT AND THE DIGITAL ECONOMY

As shown in the previous report,²¹ the copyright industries are leaders in digitalization and have helped drive the growth of the internet economy. The advancement of technology has brought fast-paced changes, increasing the need for comprehensive understanding of the **Digital Economy**.

Different countries remain responsible for producing their own taxonomies (*i.e.*, determining what gets included when measuring digitalization of the economy). Several international organizations have made researching the digital economy a priority, including UN Trade and Development,²² and the Organisation for Economic Co-operation and Development (OECD).²³ In the United States, the BEA is responsible for defining the boundaries of what constitutes the digital economy, as well as for providing several economic indicators of its aggregate and detailed contribution.²⁴

In **Table 10** below we demonstrate that the core copyright industries have represented over 50% of the total U.S. digital economy for the entirety of the observed time period, remaining relatively stable over time. In 2022, the core copyright industries represented 51.39% of the digital economy value added, or \$1.32 trillion. If we expand this definition to include the total copyright industries, there is more than \$1.6 trillion contributed to the U.S. digital economy in 2022, representing over 63% of the digital economy value added.



Digital Copyright Industries Value Added, 2020-2022 (Billions of U.S. Dollars)

	2020	2021	2022
Digital Core Copyright			
Digital Core Copyright Industries	\$1,122.43	\$1,245.80	\$1,320.53
Total Digital Economy	\$2,180.08	\$2,398.36	\$2,569.50
Total Digital Copyright	51.49%	51.94%	51.39%
Total Digital Copyright			
Total Digital Copyright Industries	\$1,382.50	\$1,529.88	\$1,622.11
Total Digital Economy	\$2,180.08	\$2,398.36	\$2,569.50
Total Digital Copyright Share of Total Digital Economy	63.42%	63.79%	63.13%

Note: Source for "Total Digital Economy" comes from "DigitalEconomy_2017-2022.xlsx" from BEA

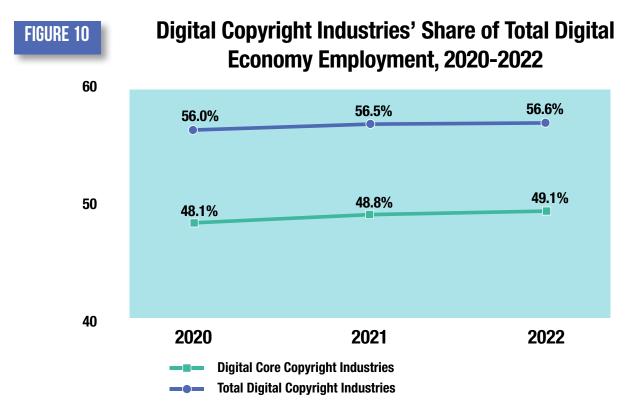
²¹ See Robert Stoner and Jéssica Dutra, Copyright Industries in the U.S. Economy: The 2022 Report.

The UN Trade and Development has produced three *digital economy reports* since 2019, each focusing on one important aspect of digitization: <u>Digital Economy Report 2024</u> focuses on *Shaping an environmentally sustainable and inclusive digital future*; <u>Digital Economy Report 2021</u> focuses on *Cross-border data flows and development: For whom the data flow*; and <u>Digital Economy Report 2019</u> focuses on *Value Creation and Capture: Implications for Developing Countries*.

The Organisation for Economic Co-operation and Development (OECD) has devoted significant resources to researching the digital economy, most recently releasing OECD (2024), OECD Digital Economy Outlook 2024 (Volume 1): Embracing the Technology Frontier, OECD Publishing, Paris, https://doi.org/10.1787/a1689dc5-en.

²⁴ The BEA up until 2022 provided several measures of economic contribution of the digital economy, including gross output, value added, and employment and compensation, which can be found here: https://www.bea.gov/data/special-topics/digital-economy.

In a similar fashion, we calculate the share of digital economy employment that derives from the core copyright industries, which is shown in Figure 10 below. For the core copyright industries, this share has stayed relatively constant with a slight increase over time, representing 48.1% of digital economy employment in 2020 and 49.1% in 2022. The total digital copyright industries share of digital economy employment has also been relatively constant, representing 56.6% of digital economy employment in 2022.25



As in our last report, the BEA's current digital economy definition does not encompass the full scope of the copyright industries' digital activities. As such, the figures discussed above are based on an incomplete picture of the digital economy and are likely to understate the contribution of the copyright industries to the digital economy to the extent that the omitted digital areas are copyright intensive.

Unfortunately, despite the undeniable importance of researching the **Digital Economy**, BEA's Digital Economy Satellite Account is no longer produced due to budget constraints. The last update was December 6, 2023.26 This Report updates the previously calculated share of the Digital Economy that is generated from copyright industries. We sincerely hope that BEA funding for study of the digital economy is restored given the need to design and appropriately measure policies that promote and nurture the production and dissemination of copyrighted materials in the digital environment.²⁷

There have been some non-trivial differences compared to our previous report in the measure of the contribution of the U.S. copyright industries to the U.S. Digital Economy. For a complete explanation, please see supra note 10.

²⁶ See supra note 24.

See Peukert, Christian, and Margaritha Windisch. "The economics of copyright in the digital age." Journal of Economic Surveys (2024).

VIII. CONCLUSION

The U.S. copyright industries have consistently outperformed the rest of the U.S. economy, in terms of their real annual growth rates and their contributions to the overall growth of the U.S. economy. These industries also command significant shares of U.S. gross domestic product and they employ millions of U.S. workers. In addition, the compensation paid to U.S. workers in the copyright industries consistently and substantially exceeds the average compensation level paid to U.S. workers as a whole. Finally, copyright sectors continue to play an outsized role in the growth of U.S. exports, as well as in the digital economy.

Value added in the copyright industries continues to grow. As of 2023, the value added by the core copyright industries was \$2,096.31 billion, approximately 7.66% of U.S. GDP. In the same year, value added for the total copyright industries stood at \$3,369.08 billion, or 12.31% of GDP. From 2020-2023, the real annual growth rates achieved by both the core and total copyright industries were significantly higher than the real growth rates exhibited by the U.S. economy as a whole, and on average the growth rate was higher than those of the world's next four largest economies.

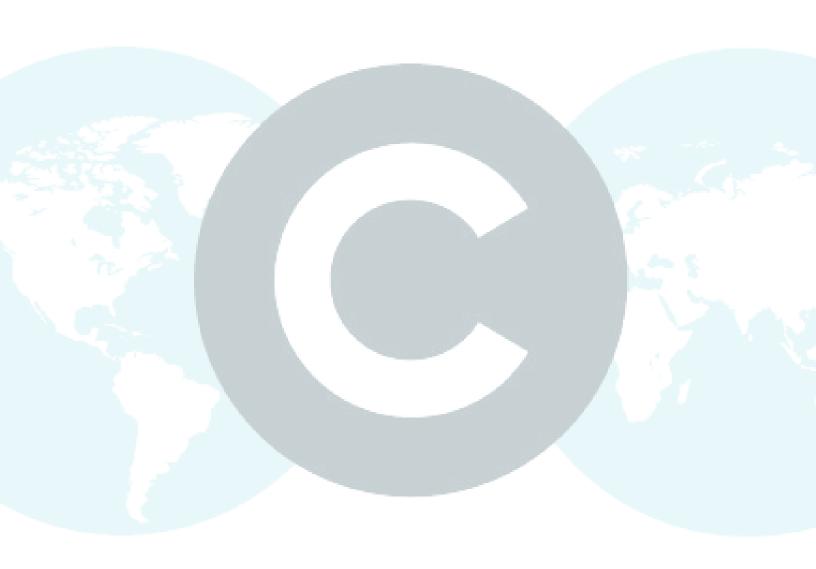
The U.S. core copyright industries now employ nearly 11.6 million workers while nearly 21.14 million people are employed by the total copyright industries. In 2023, the annual compensation paid to core copyright workers exceeded the average annual compensation paid to all U.S. workers by 50%, while the average compensation paid to employees of the total copyright industries exceeded the U.S. average by 28%.

Sales of U.S. copyright materials continue to expand in overseas markets. For selected core copyright sectors, sales in foreign markets exceeded \$272.58 billion in 2023. The foreign sales of these selected copyright sectors exceeded the foreign sales of other U.S. industries including the chemicals manufacturing industry, the aerospace products and parts industry, the agricultural products industry, and the pharmaceutical and medicines industry.

The copyright industries constitute a significant portion of the U.S. digital economy, where core digital copyright represents 51.39% of the digital economy value added in 2022, and total digital copyright represents 63.13% of the digital economy value added in the same year. Core digital copyright and total digital copyright also represent a significant portion of digital economy employment, 49.1% and 56.6% respectively in 2022. As the BEA's digital economy definition does not include many of the copyright industries' digital activities, these statistics seem likely to understate the total contribution of the copyright industries to the digital economy.

These consistently positive trends solidify the status of the U.S. copyright industries as a key engine of growth for the U.S. economy as a whole. As new technologies support the development of new distribution methods for legitimate copyrighted products, the U.S. copyright-based industries represented in the IIPA remain optimistic that economic growth, combined with strong laws, effective enforcement, and steps to open markets, will

continue to pave the way for economic growth both in the U.S. and abroad.



APPENDIX 1: TABLES OF STATISTICS

TABLE A1

Core Copyright Industries Value Added to GDP 2020-2023

	2020	2021	2022	2023	
Nominal Value Added (Billions of Dollars)					
Core Copyright Industries	\$1,628.45	\$1,815.84	\$1,960.19	\$2,096.31	
U.S. GDP	\$21,323.00	\$23,594.00	\$25,744.10	\$27,360.90	
Share	7.64%	7.70%	7.61%	7.66%	
Real Value Added (Billions of Dollars of 2017)					
Core Copyright Industries	\$1,674.82	\$1,894.79	\$2,044.00	\$2,182.59	
U.S. GDP	\$20,234.10	\$21,407.70	\$21,822.00	\$22,376.90	
Share	8.28%	8.85%	9.37%	9.75%	

TABLE A2

Total Copyright Industries Value Added to GDP 2020-2023

	2020	2021	2022	2023	
Nominal Value Added (Billions of Dollars)					
Total Copyright Industries	\$2,630.10	\$2,929.76	\$3,166.97	\$3,369.08	
U.S. GDP	\$21,323.00	\$23,594.00	\$25,744.10	\$27,360.90	
Share	12.33%	12.42%	12.30%	12.31%	
Real Value Added (Billions of Dollars of 2017)					
Total Copyright Industries	\$2,635.40	\$2,902.05	\$3,042.17	\$3,200.94	
U.S. GDP	\$20,234.10	\$21,407.70	\$21,822.00	\$22,376.90	
Share	13.02%	13.56%	13.94%	14.30%	

TABLE A3

U.S. Copyright Industry Employment, 2020-2023 (Thousands of Jobs)

	2020	2021	2022	2023
U.S. Employment				
Total U.S. Employment	194,929	195,673	207,668	213,239
Total Private U.S. Employment	172,090	172,936	184,795	189,753
Core Copyright				
Core Copyright Employment	10,460.50	10,348.70	11,271.10	11,573.60
Core Copyright Share of U.S. Employment	5.37%	5.29%	5.43%	5.43%
Core Copyright Share of Private U.S. Employment	6.08%	5.98%	6.10%	6.10%
Total Copyright				
Total Copyright Employment	18,936.10	18,905.70	20,585.80	21,138.10
Total Copyright Share of U.S. Employment	9.71%	9.66%	9.91%	9.91%
Total Copyright Share of Private U.S. Employment	11.00%	10.93%	11.14%	11.14%

TABLE A4

U.S. Copyright Industry Compensation, per Employee, 2020-2023 (U.S. Dollars)

	2020	2021	2022	2023
U.S. Employment				
Average U.S. Compensation/Employee	\$89,385.01	\$88,616.61	\$89,217.26	\$94,362.75
Average Private U.S. Compensation/Employee	\$88,850.01	\$88,022.31	\$88,749.03	\$93,867.51
Core Copyright				
Core Copyright Compensation/Employee	\$134,683	\$134,673	\$134,144	\$141,880
Ratio: Core Copyright Compensation to U.S. Compensation	1.51	1.52	1.5	1.5
Ratio: Core Copyright Compensation to Private U.S. Compensation	1.52	1.53	1.51	1.51
Total Copyright				
Total Copyright Compensation/Employee	\$115,891.61	\$115,392.34	\$114,419.37	\$121,018.36
Ratio: Total Compensation to U.S. Compensation	1.3	1.3	1.28	1.28
Ratio: Total Copyright Compensation to Private U.S. Compensation	1.3	1.31	1.29	1.29

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